

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION SPECIFICATION

CABLE, COAXIAL, RG-35B/U

1. SCOPE

1.1 Scope. This specification covers RG-35B/U cable with armor. The armor is intended to furnish protection to the cable when installed directly in the earth in areas of rodent and insect activity and from general mechanical injury.

2. APPLICABLE DOCUMENTS

2.1 Military specification. The following Military specification, of the issue in effect on the date of the invitation for bids or request for proposals, forms a part of this specification and is applicable to the extent specified herein:

MIL-C-17 Cables, Radio Frequency; with Specification Sheet MIL-C-17/25A

2.2 Other publications. The following publications, of the issues in effect on the date of the invitation for bids or request for proposals, form a part of this specification and are applicable to the extent specified herein.

2.2.1 Insulated Power Cable Engineers Association

S-19-81 (Fifth Ed.) Rubber Insulated Wire and Cable

2.2.2 National Electrical Manufacturers Association

WC-21 Non-returnable Reels for Wire and Cable

Single copies of Military Specifications and Standards may be requested by mail or telephone from U. S. Naval Supply Depot, 5801 Tabor Avenue, Philadelphia, Pennsylvania 19120 (for telephone requests, call (215) 697-3321, 8 a.m. to 4:30 p.m., Monday through Friday). Not more than five items may be ordered on a single request; the Invitation for Bid or Contract Number should be cited where applicable. Only latest revisions (complete with latest amendments) are available.

(Information on obtaining copies of IPCEA Standards may be obtained from Insulated Power Cable Engineers Association, 155 East 44th Street, New York, New York 10017).

(Information on obtaining copies of NEMA Standards may be obtained from National Electrical Manufacturers Association, 155 East 44th Street, New York, New York 10017).

(Copies of this specification may be obtained from the Contracting Officer in the Federal Aviation Administration Office issuing the invitation for bids or request for proposals. Requests should fully identify material desired, i.e., specification, standard, amendment, and drawing numbers and dates. Requests should cite the invitation for bids, request for proposals, or the contract involved or other use to be made of the requested material).

3. REQUIREMENTS

- 3.1 Armored coaxial cable. The armored coaxial cable shall consist of a basic cable, an armor and an overall jacket.
- 3.2 Basic cable. The basic cable shall be an RG-35B/U cable conforming to specification MIL-C-17 and specification sheet MIL-C-17/25A.
- 3.3 Armor. The armor shall comply with IPCEA-S-19-81 for flat metal tape armor, paragraphs 4.14.6.1 through 4.14.6.6. Joints in the armor shall be brazed or welded.
- 3.4 Overall jacket. An overall jacket shall be applied over the armor. The jacket material shall comply with MIL-C-17 for type IIIA & having a nominal thickness of 45 mils. The minimum spot thickness shall not be less than 70 per cent of the specified thickness.

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3.5 Marking. The outer jacket shall be marked at approximately five foot intervals with the name of the manufacturer & "RG-35B/U".

4. QUALITY ASSURANCE PROVISIONS

- 4.1 Responsibility for tests. All tests shall be made by the contractor using contractor furnished personnel and facilities, and will be witnessed by a government representative unless waived by the Contracting Officer. If witnessing is waived, certified test data showing compliance with specification requirements shall be furnished the Contracting Officer.
- 4.2 Production tests.— All cable shall be tested after being completely manufactured except as indicated in 4.3. Tests shall be in accordance with the pertinent paragraphs of MIL-C-17:

Jacket spark (outer jacket)
Continuity (including armor & shield)
Dielectric strength

- 4.3 Selected tests. The following tests shall be made on a representative length of cable from the first 5,000 feet, and one additional test from each subsequent 100,000 feet or fraction thereof:
- 4.3.1 Attenuation test. The attenuation test shall be in accordance with the pertinent paragraph of MTL-C-17.
- 4.3.2 Impedance test. The impedance test shall be in accordance with the pertinent paragraph of MIL-C-17.

5. PREPARATION FOR DELIVERY

- 5.1 General. Cable shall be delivered wound on reels conforming to paragraph 5.1.2.
- 5.1.1 Cable length per reel. Cable shall be delivered in one continuous 5,000 foot length per reel, except that fifteen per cent of the quantity on order may be in lengths between 1,500 feet and 2,000 feet per reel.
- 5.1.2 Reel construction. Reels shall be new and comply with NEMA Standard No. WC-21, Table I for Wood Reels. All reels shall be lagged with nominal two inch by four inch No. 2 common lumber, lagging pieces to be edge-to-edge around circumference and shall be strapped with two or more steel straps outside of lagging. The cable ends shall be sealed to prevent the entrance of moisture. The exposed cable end shall be protected by covering with sheet metal of 18 guage minimum.

<u>5.1.3 Reel marking.</u>- The contractor's name, contract number under which the cable was purchased, reel serial number, quantity and type of cable, and the name and address of the consignee shall be applied plainly on both reel flanges with permanent type ink or paint.

6. NOTES

- 6.1 Note on information items. The contents of the subparagraph below are only for the information of the Contracting Officer. They are not contract requirements, nor binding on either the Government or the contractor, except to the extent that they may be specified elsewhere in the contract as such. Any reliance placed by the contractor on the information in these subparagraphs is wholly at the contractor's own risk.
- <u>6.1.1 Cable length per reel.</u>- When cable quantities required are not multiples of lengths specified in 5.1.1, adjustment of the quantity of footage on final reel should be made.

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